

TALAUMA COLOMBIANA SP. NOV.

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This new tree species, Talauma colombiana (family Magnoliaceae), is based upon a specimen collected in the southern part of Departamento del Huila, Colombia, in 1944.

The genus Talauma Juss. of the family Magnoliaceae has about 40-50 species. Most are in tropical and subtropical Asia, also several in tropical America from southern Mexico and West Indies to eastern Brazil, according to J. E. Dandy (in J. Hutchinson, Gen. Fl. Plants 1: 55. 1964).

Apparently only one species of this genus has been named from Colombia. Published more than a century ago without a specimen, the name is of uncertain application. It was based upon an older description instead of a specimen and seems not to have been identified further. Talauma cespedesii Triana & Planchon (Ann. Sci. Nat. Bot. Sér. 4, 17: 23. 1862), from the province of Bogotá, was known to its authors only from the quoted, earlier description by Cespedes. José Triana and J. E. Planchon explained that in a loose sheet printed in Bogotá about 1840, Cespedes has proposed the generic name Santanderia, in the family Annonaceae. No specific epithet was mentioned. From Cespedes's description, they published the new species, placing it in Talauma and honoring the describer.

This poorly known species is not represented at the United States National Herbarium (US), which has large plant collections from Colombia. That herbarium has only one sheet from Colombia filed doubtfully under Talauma, a sterile specimen from Yarumal, Antioquia. Talauma dixonii Little (Phytologia 18: 457, fig. 11. 1969) was published recently from the Province of Esmeraldas, on the Pacific Coast of northwestern Ecuador, about 300 km. west (slightly south of due west) of the locality of the new species from Huila on the opposite side of the Andes.

The related genus Magnolia L. apparently has not been recorded as native in Colombia. However, M. grandiflora L. from southeastern United States is planted as an ornamental. Three local species are known from the Guayana highlands of Venezuela: M. paritepuiana Steyererm., M. roraimae Steyererm., and M. chimantensis Steyererm. & Maguire. (Material of Talauma, not yet named, has been collected in Venezuela also.) Recently M. striatifolia Little (Phytologia 18: 198, fig. 2. 1969) was described from Esmeraldas, Ecuador, at about Lat. 1° N., the southernmost record of the genus in the New World. Mention of a new species in southern Colombia refers to the following new species of Talauma.

TALAUMA COLOMBIANA Little, sp. nov.

Arbor mediocris sempervirens ad 15 m. alta, trunco 20 cm. diametro. Cortex laevis griseus. Ramuli crassi, statu juvenili pubescentes, demum glabri, nodis annulatis. Stipula perlonga, gemmam longam anguste cylindricam 7 cm. longitudinale 1 cm. diametro obducens, extus adpresso-pubescent, intus glabrata, ab petiolo libera, caduca. Foliorum alternorum petioli 1-2 cm. longi, longitudinaliter sulcati, hirsuti, demum glabrati. Laminae lato-ellipticae, 10-18 cm. longae, 8-11 cm. latae, coriaceae, apice rotundatae, basi obtusae, margine parum revolutae, supra virides nitidae glabrae costa impressa puberula atque nervis lateralibus utrinque 15-25 tenuibus parallelis rectis sub angulo c. 70° abeuntibus, subtus dense adpresso-pubescentes pilis fulvis costa prominenti hirsuta.

Fructus aggregatus lignosus nigricans glabratus, carpellis multis concretis c. 2 cm. longis circumscissilibus, stylis acuminatis persistentibus 2-3 mm. longis. Semina 1 vel 2 in loculo, parum triangularia, 7-9 mm. longa, 6-7 mm. lata, 3 mm. crassa, atrocastanea. Flores non visi.

Medium-sized evergreen tree to 15 m. high, with trunk 20 cm. in diameter. Bark smooth, gray. Twigs stout, pubescent when young, becoming glabrous, with ringed nodes. Stipule very long, covering long narrowly cylindrical bud to 7 cm. long and 1 cm. in diameter, on the outside appressed pubescent, on the inside glabrate, free from petiole, caducous. Petioles of the alternate leaves 1-2 cm. long, longitudinally grooved, hirsute, becoming glabrate. Blades broadly elliptic, 10-18 cm. long, 8-11 cm. broad, coriaceous, rounded at apex, obtuse at base, slightly revolute at margin, above shiny green and glabrous with impressed puberulent costa and on each side 15-25 slender parallel straight lateral nerves departing at angle about 70°, beneath densely appressed pubescent with yellow-brown hairs and with prominent hirsute costa.

Fruit aggregate, woody, blackish, glabrate, with many conrescent carpels about 2 cm. long, circumscissile, with acuminate persistent style 2-3 mm. long. Seeds 1 or 2 in a cell, slightly triangular, 7-9 mm. long, 6-7 mm. broad, 3 mm. thick, dark brown. Flowers not seen.

COLOMBIA, HUILA: Cordillera Oriental, near Río Suaza southwest of Alejandría, alt. 6000 ft., scattered in rich *Quercus* forest, Aug. 24, 1944, E. L. Little, Jr. 8538 (HOLOTYPE, US 2142741 (fruit); also 2143102; unicate mounted on 2 sheets):

Talauma colombiana is a rare, relic species of an ancient, primitive genus. In more than a year of field work in Huila, I found this conspicuous species only once. Notes on its discovery and occurrence follow.

Botanical exploration of the northern Andes was expanded considerably during World War II, because of the wartime procurement program of the Cinchona Division (or Mission) of the Foreign Economic Administration, an agency of the United States Government. There was an urgent need for the anti-malarial quinine and related cinchona alkaloids obtained from the bark of a few species of Cinchona L. (Rubiaceae) native in the upper montane forests of the Andes. This program was well summarized by W. H. Hodge (Wartime Cinchona procurement in Latin America. Econ. Bot. 2: 229-257, illus. 1948). A partial list of the botanists and foresters from the United States who participated was added in a footnote on the first page. Though not listed, I was a botanist with the cinchona surveys in Colombia from November 1943 to April 1945. My field work was mostly in Departamento del Huila, capital Neiva, in the upper Magdalena Valley southwest of Bogotá and bordered by the Cordillera Oriental and Cordillera Central of the Andes. My botanical explorations mostly in the eastern part of Huila extended along Cordillera Oriental, a distance of about 400 kilometers. In the search for Cinchona or "quina," special attention was given to that genus and related Rubiaceae. Also, as time permitted, I made limited collections of tree specimens toward preparation of a list of the trees of Huila.

Talauma colombiana was discovered in a rather inaccessible area at the southernmost part of Huila, approximately Long. 76° 0' W., Lat. 1° 35' N. Geographically it was near the source of Río Suaza and Picos de la Fragua on the northern slope of Cordillera Oriental. Cueva de los Guácheros, a limestone cave near Río Suaza, was a local landmark several kilometers distant. In 1944 the truck road ended at Suaza, about 120 km. by airline south-southwest of Neiva. Southward from Suaza a 2-day trip by horse and pack train led through Acevedo to Alejandría. Field work continued for several days on foot in the vicinity of Cueva de los Guácheros, through the montane forests to the timberline of the divide at an altitude of 2500 m. (8100 ft.), and back. On the last day near Río Suaza at about 1800 m. (6000 ft.), the trail passed through a "rich" or luxuriant oak forest. The dominant species of the montane forest here was an evergreen oak or "roble," Quercus humboldtiana Bonpland (E. L. Little, Jr. 8509; US, COL). In this oak forest were scattered trees of a species not observed elsewhere, a magnolia! The limbs were out of reach, but from the ground along the trail I collected two leafy twigs and a detached fruit, enough for a unicate specimen. The distance on a straight line was perhaps 10-15 km. southwest of the village of Alejandría.

Quercus humboldtiana Bonpland, of Colombia, is the southernmost New World representative of the genus Quercus (oak), one of the most widespread tree genera in the Northern Hemisphere. It is near its southern limit in southern Huila. However, westward it extends perhaps 50 km. farther south in the mountains near Pasto, Nariño, but does not reach Ecuador. This oak is scattered in the mountains and was collected also at the northern end of Huila, northeast of Santa Ana (E. L. Little, Jr. 7319, 7320; US, COL).

Obviously the new species of the magnolia family is rare and local. An evergreen magnolia, especially in flower, would be too conspicuous to be overlooked by botanical collectors. The trees observed may be the survivors of an ancient, nearly extinct line.

It seems appropriate to assign a name to this distinct local species, even though the material is incomplete, lacking flowers. No additional specimens have been noted or named during the 25-year interval. Also, a definite record of the genus Talauma in Colombia can be cited. After a routine identification several years ago, the two sheets of the type collection have been filed under Magnolia grandiflora L., perhaps because of a slight resemblance of the shiny leathery leaves. As preserved, the fruit consists of several outer pieces of carpels with styles, also 3 seeds but no axis. Because the carpels are circumscissile and have split off from an axis, the specimens are referred to Talauma rather than Magnolia. However, as in the latter genus, the stipule of the specimen is free from the petiole and forms no scar on the petiole. In Talauma the stipule commonly is adnate to the upper surface of the adjacent petiole.

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